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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,004	11/16/2001	Tse-Hua Lan	US 010611	2589

24737 7590 03/29/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

SENI, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/996,004

Applicant(s)

LAN ET AL.

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 - 4, 6 – 9, 11 – 13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim (US 2002/0037053).

Regarding claims 1, 7 and 9, Kim '053 discloses a method for "decoding an MPEG video signal for display" (i.e. fig. 2), and determination "converting non-full pixel motion vector to full pixel motion vector and producing a motion compensated MPEG video picture based on the converted full pixel motion vector" reads on (fig. 10, page 6, section 0082), and, the claimed "VLD producing decoded data in claim 7" (i.e. fig. 2, VLD 3), and "dequantizing the decoded data in claim 7" (i.e. fig. 2, IQ 4), and "employing the IDCT in claim 7" (i.e. fig. 2, IDCT 5) and "employing MC in claim 7" (i.e. fig. 2, MC 6).

Regarding claims 2, 8 and 13, Kim '053 discloses the claimed "half pixel motion vector" (i.e. fig. 13).

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Regarding claim 3, the limitation claimed “produce a motion compensated MPEG video based on full pixel motion vector if signal contains full pixel motion vector” reads on (page 6, section 0087, lines 14 – 16 of Kim).

Regarding claims 4, 6 and 11, Kim '053 discloses, “decoding a compressed video data stream including macro-blocks in claim 4” (i.e. abstract), and the claimed “P frame and B frame in claim 6” (i.e. page 6, section 0084).

Regarding claim 12, the limitations claimed are substantially similar to claim 7, therefore the grounds for rejecting claim 7, also apply here. Furthermore, the additional limitation “complexity selector to detect a motion vector type from the VLD” reads on (fig. 2, motion vector, motion type).

Regarding claim 15, the limitations claimed are substantially similar to claim 6, therefore, the grounds for rejecting claim 6, also apply here.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim '053 in view of Zhong et al (US 2002/0163969)

Regarding claims 5, 10 and 14, Kim '053 teaches a method for “decoding an MPEG video signal for display and converting non-full pixel motion vector to full pixel motion vector and producing a motion compensated MPEG video picture based on the

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converted full pixel motion vector" (fig. 10, page 6, section 0082) and "interlace video scanning type" (page, 2, sections 0018 and 0021). Kim '053 fails to explicitly teach, "rounding the odd number MV to the nearest even number". However, the above claim limitation is well known and used in the art as evidenced by Zhong '969 (i.e. pages, 2 and 3, sections 0036 and 0038). Taking the combined teaching of Kim '053 and Zhong '969 as a whole, would make the above limitation "rounding MV" obvious to one having ordinary skill in the art. Doing so would improve the decoding process, which would eliminate irregularities in the output video.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9314**


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

3/21/2004

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600